Rec'd PCT/PTO 19 JUL 2005

PATENT COOPERATION TREATY

PCT



RECEIVED

AUG 0 9 2004

CLARK HILL

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER ACTION as we	see Form PCT/ISA/220 rell as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/US2004/002952	03/02/2004	03/02/2003
Applicant		
TIME SUMOMOUTUR THE		
INTIER AUTOMOTIVE INC.		
This International Search Report has been according to Article 18. A copy is being tra	en prepared by this International Searching Acansmitted to the International Bureau.	uthority and is transmitted to the applicant
This International Search Report consists		
X It is also accompanied by	a copy of each prior art document cited in th	ils report.
Basis of the report		
 With regard to the language, the language in which it was filed, uni 	international search was carried out on the biless otherwise indicated under this item.	pasts of the international application in the
The international this Authority (Rui	search was carried out on the basis of a tran ile 23.1(b)).	nslation of the International application furnished to
b. With regard to any nucleo	otide and/or amino acid sequence disclose	ed in the international application, see Box No. I.
2. Certain claims were four	ind unsearchable (See Box II).	
3. Unity of invention is lact	king (see Box III).	
4. With regard to the title,		
X the text is approved as su	• • • • • • • • • • • • • • • • • • • •	
the text has been established	shed by this Authority to read as follows:	
- still consults the shelpest		
 With regard to the abstract, the text is approved as sut 	the state of the sections	•
the text has been establish	hed, according to Rule 38,2(b), by this Author	wity as it appears in Box No. IV. The applicant
may, within one month from	m the date of mailing of this international sea	arch report, submit comments to this Authority.
6. With regards to the drawings,		
•	ublished with the abstract is Figure No	
X as suggested by the		
as selected by this	s Authority, because the applicant falled to su	aggest a figure.
	s Authority, because this figure better charact	
b. none of the figures is to be	published with the abstract.	

Form PCT/ISA/210 (first sheet) (January 2004)

BEST AVAILABLE COPY

INTEL ATIONAL SEARCH REPORT

International Application No

CT/US2004/002952 A. CLASSIFICATION OF IPC 7 B60N2/68 CT MATTER G01M17/007 G01M19/00 G06F17/50 According to International Patent Classification (IPC) or to both national classification and IPC 8. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) B60N G01M G06F G06T Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 6 352 312 B1 (REES RICHARD W A) 1-16 5 March 2002 (2002-03-05) column 13, line 36 - line 45 X EP 1 262 886 A (SUMITOMO RUBBER IND) 1-16 4 December 2002 (2002-12-04) figure 2 A DE 202 10 946 U (TRW REPA GMBH) 1,10 21 November 2002 (2002-11-21) page 9, line 26 - page 10, line 6 figure 13 Α US 5 930 155 A (KUBO SUSUMU ET AL) 1,10 27 July 1999 (1999-07-27) figures 9,10

<u> </u>	
Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: 'A' document defining the general state of the art which is not considered to be of particular relevance 'E' earlier document but published on or after the international filing date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another claim or other special reason (as specified) 'O' document reterring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filing date but later than the priority date claimed	 "T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X' document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&' document member of the same patent family
Date of the actual completion of the international search 28 July 2004	Date of mailing of the international search report 05/08/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Fax: (+31-70) 340-3016	Authorized officer Cauderlier, F

Form PCT/ISA/210 (second sheet) (January 2004)

1

INTEL. ATIONAL SEARCH REPORT

Invernational Application No

legory* Caation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. WO 98/54663 A (SHIMMELL DENNIS S; NELSON METAL PROD CORP (US)) 3 December 1998 (1998–12–03) figures 4,8	WO 98/54663 A (SHIMMELL DENNIS S; NELSON METAL PROD CORP (US)) 3 December 1998 (1998-12-03) figures 4,8		otton) DOCUMENTO CONSIDERED TO BE RELEVANT	Ta.
METAL PROD CORP (US)) 3 December 1998 (1998-12-03) figures 4,8	METAL PROD CORP (US)) 3 December 1998 (1998-12-03) figures 4,8	ategory *	Citation of document, with indication, where appropriate, of the relevant passages	Helevant to claim
			METAL PROD CORP (US)) 3 December 1998 (1998-12-03)	1,10
			•	

Form PCT/ISA/210 (continuation of second sheet) (January 2004)

1

INTEL ATIONAL SEARCH REPORT

Information on patent family members

Inamational Application No	
CT/US2004/00295	2

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 6352312	B1	05-03-2002	NONE			
EP 1262886	A	04-12-2002	JP EP US	2002350294 1262886 2002177976	A2	04-12-2002 04-12-2002 28-11-2002
DE 20210946	U	21-11-2002	DE	20210946	U1	21-11-2002
US 5930155	A	27-07-1999	JP JP	3224089 10267800		29-10-2001 09-10-1998
WO 9854663	A	03-12-1998	US BR CA EP JP WO	5956500 9804897 2253799 0916121 2000509180 9854663	A A1 A1 T	21-09-1999 18-01-2000 03-12-1998 19-05-1999 18-07-2000 03-12-1998